

Year 9 Foundation Expected Standards



	Foundation	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
	Prior knowledge	Working towards Y9F Expected standards	Working towards Y9FExpected standards Plus	Meeting Y9F Expected standards	Working above Y9F Standard	Working well above Y9F Standard
Number, Ratio, Proportion and Rates of Change	Use fraction notation to describe parts of shapes Know square numbers Round whole numbers to the nearest 10, 100 or 1000 Use written methods for HTU x U	Know multiplication facts up to 10 x 10 Multiply and divide integers by 10 and 100	Use column method to add and subtract numbers Multiply mentally TU x U Place value	Use compound measures: density, speed. Convert numbers into and out of standard form Use the laws of indices to multiply and divide numbers written in index notations	Multiply and divide decimals Use a multiplier to increase or decrease by a percentage Standard form Interpret calculator displays Terminating decimals and fractions	Write number as the product of its prime factors Add and subtract fractions Multiply and divide decimals
Algebra	Apply +, -, x and ÷ in correct order to whole numbers and proper fractions Be able to use > or < correctly between two positive decimals up to 4 or 5 significant figures	Add, subtract, multiply and divide positive and negative whole numbers	Use simple number machines Read positive x and y co-ordinates	Plot graphs given in the form y = mx + c Draw distance-time and velocity-time graphs Solve simultaneous equations	Solve quadratic equations by factorising Rearrange simple equations Nth term of linear sequence Finding equation of straight line	Solve equations with unknown on both sides Substitute positive and negative numbers into formulae
Geometry and Measures	Suggest suitable units to estimate or measure length, mass and capacity Know the names of parts of circles	Know the sum of angles around a point and on a straight line	Measure lines to the nearest millimetre Use a protractor to measure acute angles to the nearest degree	Use the formulae for area and circumference of a circle Find the volume and surface area of prisms	Use constructions to show locus of a point Begin to use trigonometry to find the size of an angle in a right-angle triangle	Solve angle problems involving parallel and intersecting lines, triangles and polygons Apply Pythagoras' Theorem to solve problems
Statistics and Probability	Produce dual bar charts Interpret simple pie charts	Calculate the mean, median, mode and range for discrete data	Use a probability scale with words Represent data in a table	Draw and use sample space diagrams Recognise the advantages and disadvantages between measures of averages	Find the range, modal class, interval containing the median and an estimate of the mean from a grouped frequency table Draw and interpret scatter graphs	Draw pie charts and box plots Scatter graphs Histograms with equal class widths